

### **ABSTRACT OF THE DISCLOSURE**

An improved method and apparatus for a liquid filling system is herein disclosed incorporating means for generating greater overall production rate efficiencies (i.e. number of filled containers per minute per filling station) for automatic systems utilizing diverter valve and/or walking beam (i.e. continuous-motion) filling technologies with, for example, non-traditional ratios between the number of filling stations and the number of filling nozzles. The methods/apparatus disclosed herein also incorporate means to more efficiently changeover and clean up, in either a clean-in-place (CIP) or clean-out-of-place (COP) configuration, the product contact parts that become “dirty” when used in a production environment. Finally, an improved method and apparatus designed to provide a means for priming and air purging the product contact path of liquid filling machinery, a fill volume calibration procedure, and a fill weight verification cycle is also herein described.